

What is claimed is:

1. In a building with walls and more than one floor, an internal building pressure apparatus comprising:

- 5 a) **at least one pressure sensor per floor;**
- b) **a connection means for connecting pressure sensors; and**
- c) **an analysis means connected to said pressure sensors for receiving**
 input from said pressure sensors and for providing sensor data
 output.

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2. The apparatus of claim 1 further comprising a control system connected to said analysis means wherein said control system regulates pressure on each floor.

15 **3. The apparatus of claim 1 wherein said building includes multiple floors and said analysis means provides sensor data output from a group of outputs including**
sensor data output from adjacent floors and sensor data output from non-adjacent
floors.

20 **4. The apparatus of claim 1 wherein said sensor data output includes output from a group including maximum pressure, minimum pressure, average pressure and**

pressure in-between maximum and minimum, for a particular floor and the building as a whole.

5. The apparatus of claim 1 further comprising at least one pressure sensor outside
5 of said building and wherein said sensor data output includes output from a group including total internal building pressure, internal pressure of a particular floor, internal pressure of a portion of a particular floor and outside pressure.
6. The apparatus of claim 1 wherein said sensor data output includes output from a
10 group including within wall pressure only and between floor pressure only.
7. The apparatus of claim 1 wherein element a) includes a plurality of pressure sensors per floor.
- 15 8. The apparatus of claim 1 wherein element a) includes pressure sensors on walls, floors and ceilings.
9. The apparatus of claim 1 wherein said at least one pressure sensor is placed in a location selected from a group including within a wall cavity, within a floor cavity,
20 within a ceiling cavity, in a room, corridor, hall and foyer and any interstitial space of said building.

10. In a building with walls and multiple floors, an internal building pressure apparatus comprising:

- a) at least one pressure sensor on at least more than one of said multiple floors;**
- b) a connector connecting pressure sensors; and**
- c) an analyzer connected to said pressure sensors for receiving input from said pressure sensors and for providing sensor data output.**

11. The apparatus of claim 10 further comprising a controller connected to the analyzer for controlling the pressure in said building in response to sensor data output from said analyzer.

12. The apparatus of claim 10 wherein said building includes multiple floors and said analyzer provides sensor data output from a group of outputs including sensor data output from adjacent floors and sensor data output from non-adjacent floors.

13. The apparatus of claim 10 wherein said sensor data output includes output from a group including maximum pressure, minimum pressure, average pressure and pressure in-between maximum and minimum, for a particular floor and the building as a whole.

14. The apparatus of claim 10 further comprising at least one pressure sensor outside of said building and wherein said sensor data output includes output from a group including total internal building pressure, internal pressure of a particular floor, internal pressure of a portion of a particular floor and outside pressure.

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15. The apparatus of claim 10 wherein said sensor data output includes output from a group including within wall pressure only and between floor pressure only.

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16. The apparatus of claim 10 wherein element a) includes a plurality of pressure sensors per floor.

17. The apparatus of claim 10 wherein element a) includes pressure sensors on walls, floors and ceilings.

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18. The apparatus of claim 10 wherein said at least one pressure sensor is placed in a location selected from a group including within a wall cavity, within a floor cavity, within a ceiling cavity, in a room, corridor, hall and foyer and any interstitial space of said building.

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19. In a building with walls and multiple floors, a method of controlling internal building pressure, the method comprising the steps of;

- a) providing at least one pressure sensor on at least more than one of said multiple floors;
- b) connecting pressure sensors; and
- c) attaching an analyzer to said pressure sensors for receiving
5 input from said pressure sensors and for providing sensor data
output.

20. The method of claim 19 further comprising the step of attaching a controller to the analyzer and controlling the pressure in said building in response to sensor data
10 output from said analyzer.

21. The method of claim 19 wherein said building includes multiple floors and said analyzer provides sensor data output from a group of outputs including sensor data output from adjacent floors and sensor data output from non-adjacent floors.

15 22. The method of claim 19 wherein said sensor data output includes output from a group including maximum pressure, minimum pressure, average pressure and pressure in-between maximum and minimum, for a particular floor and the building as a whole.

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23. The method of claim 19 further comprising the step of providing at least one pressure sensor outside of said building and wherein said sensor data output includes output from a group including total internal building pressure, internal pressure of a particular floor, internal pressure of a portion of a particular floor and outside pressure.

24. The method of claim 19 wherein said sensor data output includes output from a group including within wall pressure only and between floor pressure only.

25. The method of claim 19 wherein step a) includes providing a plurality of pressure sensors per floor.

26. The method of claim 19 wherein step a) includes providing pressure sensors on walls, floors and ceilings.

27. The method of claim 19 further comprising the step of placing pressure sensors at locations selected from a group including within a wall cavity, within a floor cavity, within a ceiling cavity, in a room, corridor, hall and foyer and any interstitial space of said building.